GONCHARENKO, N.M.

Presentation of the concept of a physical quantity in a physics course of a secondary school. Dokl. i soob. UzhGU. Ser. fiz.-mat. i ist. nauk no.5:103-104 '62.

General review of a physics course in secondary schools from the point of view of inducing students to adopt a materialistic conception of the world. Ibid.:104-123 (MIRA 17:9)

GONCHARENKO, N.T., inzh.

Transportation of short pieces of lumber in containers.
Mekh.i avtom.proizv. 14 no.9:30-32 S '60. (MIRA 13:9)
(Lumber--Transportation)

GONCHARENKO, Nikolay Timofeyevich; SHISHLYKOV, Ye.S., red.

[Organization of lumber loading] Organizatsiia pogruzki lesomaterialov. Moskva, Izd-vo Lesnaia promyshl., 1964. 147 p.
(MIRA 17:7)

GONCHARENKO, N.V.; PETUKHOV, S.V.

Use of compressed air for opening press molds and dies. Lit. proizv. no.4:44-45 Ap '62. (MIRA 15:4)
(Die casting) (Compressed air)

KOROTKORUCHKO, V.P.; GONCHARENKO, O.G. [Honcharenko, O.H.], studentka

Adenase and guanase acticity in mammalian tissues. Ukr.biokhim.
zhur. 34 no.5:720-726 '62. (MIRA 16:4)
(ADENASE) (GUANASE)

GONCHARENKO, O.T.; KULACHKOVSKIY, Yu.V.

Course of postpartum pulmonary tuberculosis. Probl.tub. 34 no.6 supplement:19 N-D '56.
(MIRA 10:2)

1. Iz L'vovskogo nauchno-issledovatel'skogo instituta okhrany materinstva i detstva (dir. I.D.Yashchuk) i kafedry tuberkuleza (zav. - prof. I.T.Stukalo) L'vovskogo meditsinskogo instituta (dir. - prof. L.N.Kuzmenko)

(TUBERCULOSIS, PULMONARY,
postpartum (Rus))
(PUERPERIUM, complications,
tuberc., pulm. (Rus))

LAGUNOV, B., kand.tekhn.nauk; GONCHARENKO, P.

Solid iron plating of parts. Avt.transp. 43 no.11:34-36
N '65.
(MIRA 18:12)

GALYATIN, V.M.; KALINSKIY, D.N.; Prinimali uchastiye: KUROCHKIN, I.F.; DUVANOV, A.I.; SOLOV'YEV, Yu.F.; GERASIMOV, Yu.V.; GROSVAL'D, V.G.; SHASHKOV, N.N.; VOLKOV, A.A.; ZHILKO, E.I.; MITROPOL'SKIY, Yu.I.; FEDOSEYEV, S.V.; GONCHAROV, F.I., rabotnik; SHEMETOV, P.Ye., rabotnik; CHUPRINA, I.A., rabotnik; DEMIN, P.Ye., rabotnik; GONCHARENKO, P.V., rabotnik; SIMANYUK, G.N., rabotnik

Investigating power and technological parameters of rolling on the 2350 medium sheet mill. [Sbor. trud.] TSNIICHM no.29:138-148 '63. (MIRA 17:4)

1. Sotrudniki TSentral'nogo nauchno-issledovatel'skogo instituta chernoy metallurgii (for Gerasimov, Grosval'd, Shashkov, Volkov, Zhilko, Mitropol'skiy, Fedoseyev). 2. Listoprokatnyy tsekh Magnitogorskogo metallurgicheskogo kombinata (for Goncharov, Shemetov, Demin, Chuprina, Goncharenko, Simanyuk).

GONCHARENKO, P. [Honcharenko, P.]

Made with their skillful hands. Znan. ta pratsia no.3:15 Mr '59.
(MIRA 12:10)

(Engineering models)

GONCHARENKO, P. [Honcharenko, P.]

A star over Belaya Krinitsa. Znan.ta pratsia no.7:2-3 Jl '59. (MIRA 13:2)

(Belaya Krinitsa (Rovno Province)--Dairying)

GONCHARENKO, P. [Honcharenko, P.]

Stream of well-being. Znan. ta pratsia no.8:15 Ag '59.
(MIRA 13:2)

(Lutsk--Clothing industry)

GONCHARENKO, Pavlina [Honcharenko, P.]; SHNAYDER, Ya. [Shnaidor, IA.]

From the Dnieper to the Vltava. Znan.ta pratsia no.10:13-16
O '59. (MIRA 13:2)
(Czechoslovakia--Description and travel)
(World federation of democratic youth)

GONCHARENKO, P. [Honcharenko,P.]

The inventor. Znan.ta pratsia no.7:9 Jl '60.
(MIRA 13:8)
(Rubber industry--Technological innovations)

GONCHARENKO, P. [Honcharenko, P.]

If you like your work. Znan. ta pratsia no. 11:10 N '60.
(MIRA 14:4)
(Automobile drivers)

GONCHARENKO, P. [Honcharenko, P.]

My dear friend Serhii! Znan. ta pratsia no.1:4-5 Ja '62.
(MIRA 15:1)
(Ukraine--Industrial research)

GONCHARENKO, P.

Silver water. IUn.tekh. 6 no.2:66-68 '62. (MIRA 15:2)
(Silver--Physiological effect)

GONCHARENKO, P. (Selo Greygovo Oktyabr'skogo rayona Nikolayevskoy oblasti)

Tamed lightning. IUn.nat. no.4:8-9 Ap '62. (MIRA 15:4)
(Plants, Effect of electricity on) (Corn (Maize))

GONCHARENKO, P. [Honcharenko,P.]

Academy in the field. Znan.ta pratsia no.9:8-10 S '61.
(MIRA 14:8)

(Zaleshduki District—Corn (Maize))

SHTEPA, B.G., GONCHARENKO, P.A.

Creation of a wide area of raw products for the canning industry in the Volga-Akhtuba flood plain. Kons.i ov.prom. 15 no.11:25-27 N '60. (MIRA 13:10)

1. Yuzhgiprovodhoz.
(Volga Valley—Canning industry)

GONCHARENKO, P.A., inzh. (Rostov-na-Donu)

Economic justification of irrigation construction. Gidr.
i mel. 17 no.7:5-8 Jl '65. (MIRA 18:12)

GONCHARENKO, P.T., [~~Honcharenko, P.T.~~], kand.tekhn.nauk, dots.

Let's provide collective farms with first-class machinery. Nauka
i zhyttia 8 no.5:24-27 My '58. (MIRA 13:4)
(Agricultural machinery)

GONCHARENKO, P.T., kand. tekhn. nauk, dots.

Technological progress in agriculture. Nauka i zhyttia 9 no.9:25-28 S '59. (MIRA 13:1)

(Agricultural machinery)

GONCHARENKO, P.T., dots.

Creator of agricultural mechanics. Nauka i zhyttia 10 no.9:30-31 S '60. (MIRA 13:9)
(Goriachkin, Vasilii Prokhorovich, 1868-1935)

GONCHARENKO, P.T. [Honcharenko, R.T.], dotsent

Automats in the fields and on the farms. Nauka i zhyttia 10 no. 12:28-31 D '60. (MIRA 14:4)

(Farm mechanization) (Automatic control)

GONCHARENKO, R.B. (Leningrad)

Calculation of transients in excitation systems. Izv. AN SSSR. Otd. tekh. nauk. Energ. i transp. no.3:276-280 My-Je '63.
(MIRA 16:8)

GONCHARENKO, R.B.; DANILEVICH, Ya.B.; LOGINOV, S.I.

Design and study of the excitation system of a synchronous motor with three-winding transformer and semiconductor rectifiers. Sbor.rab. po vop.elektromekh.no.8:167-176 '63.

(MIRA 16:5)

(Electric motors, Synchronous) (Electric power distribution)

L 3[illegible]-65 EWT(1)/EPA(s)-2 GS

ACCESSION NR: AT5003619 S/0000/[illegible]/0085

AUTHOR: Goncharenko, R. B.

B+1

TITLE: Calculation on a computer of transients in synchronous machines excited by semiconductor rectifiers

SOURCE: AN SSSR. Institut elektromekhaniki. Avtomatizirovannyy elektroprivod (Automated electric drive). Leningrad, Izd-vo Nauka, 1964, 80-85

TOPIC TAGS: synchronous machine, synchronous machine transient, semiconductor rectifier, transient calculation

ABSTRACT: Transients whose effects may be detrimental to excitation-supply rectifiers can be calculated by the numerical integration of a set of 7 Park-Gorev differential equations. Direct-axis and quadrature-axis equivalent circuits are [illegible]. The differential equations are solved for magnetic flux linkages and [illegible]. The final equations [illegible]

Card 1/2

L 32855-65

ACCESSION NR: AT5003619

computer and numerically solved; computation of each point took 12 seconds; maximum error, 0.0005 or less. Calculated values of the transients that accompany loss of synchronism, synchronization, and short circuits were found to be in good agreement with experimental data (for a 30-kw synchronous motor). Orig. art. has: 2 figures and 7 formulas.

ASSOCIATION: none

SUBMITTED: 08Jul64 ENCL: 00 SUB CODE: EE

NO REF SOV: 005 OTHER: 001

Card 2/2

L 20775-65 AFWL/SSD/ASD(a)-5/BSD/AFMD(p)/AFETR/AFTC(b)/[illegible]

ACCESSION NR: AP5003791 S/0144/64/000/009/1066/1081

AUTHOR: Boguslavskiy, I. Z.; Goncharenko, R. B.; Dombrovskiy, V. V.; Kogan, V. V.; Sivkov, A. P.; Sibel'nikov, A. V.; Khutoretskiy, G. M.

TITLE: Use of electronic digital computer "Minsk-I" for practical design of electrical machines

SOURCE: IVUZ. Elektromekhanika, no. 9, 1964, 1066-1081

TOPIC TAGS: computer calculation, electric equipment digital computer/Minsk-1 computer

Abstract: The authors discuss the use of digital computers for the design of specialized machines which are produced in small numbers and which cannot be computed using standardized programs. The most difficult problems are encountered when designing machines utilizing new cooling systems and materials and machines operating at high specific loads. The article contains detailed discussion of five projects solved at the Laboratory for Numerical Calculation Devices of the Leningrad Affiliate of the All-Union Scientific-Research Institute of Electrical Machines during the 1962-1963 period: 1) the calculation of the starting characteristics of synchronous motors with large rotors; 2) the checked calculation of electrical circuitry of hydrogenerators; 3) the exact magnetic calculation of teeth

Orig. art. has: 7 figures, 19 formulas.

Card 1/2

L 20775-65
ACCESSION NR: AP5003791

of electric machines; 4) the calculation of transient processes in synchronous and asynchronous machines; and 5) the calculation of forced oscillations of turbogenerator rotors.

ASSOCIATION: none

SUBMITTED: 08May64

ENCL: 00

SUB CODE: DP, EE

NO REF SOV: 000

OTHER: 000

JPRS

Card 2/2

GONCHARENKO, S.A.

Organizations of public assistance to technological progress at enterprises in Kurgan Province. Opyt rab. po tekh. inform. i prop. no.2:34-35 '63. (MIRA 16:12)

GONCHARENKO, S.D.

SUBJECT: USSR/Cement Mills 101-4-9/13

AUTHOR: Goncharenko, S.D., Engineer (Khar'kov)

TITLE: Adjusting Operations at Cement Mills (Opyt naladki raboty tsementnoy mel'nitsy)

PERIODICAL: Tsement, 1957, # 4, p 29 (USSR)

ABSTRACT: In order to reduce air suction, cement leaving the mill is conveyed through a sectional cut-off device. Pipes, transporting dust from dust extractors are equipped with shutters; dust trapped by filters is transported through sectional shut-off devices; joints between the mill and aspirator box are sealed with thin rubber belts. High work efficiency of the mill was ensured by the high dust-reducing coefficient of 0.99. Well dehydrated granulated slag with a specific weight of 1-1.3 offered favorable conditions for milling and filtering operations. Foreign matter was removed from the mill by sifting at least twice a month. The output of the mill increased during the last 10 years from 14 to 21 tons/hour. The article contains 1 table.

INSTITUTION: **Khar'kov Cement Plant (Khar'kovskiy tsementnyy zavod)**

PRESENTED BY:

SUBMITTED:

AVAILABLE: At the Library of Congress

Card 1/1

GONCHARENKO, S.F.

Pliers for the fixing of rubberized belts. Ogneupory 27 no.7:335 '62. (MIRA 15:8)

(Conveying machinery)

KUPKIN, S. A.; GONCHARENK~~E~~O, S. P., Veterinarians
"Hematuria in cattle."
SO: Veterinariia 24(1), 1947, p. 36.

GONCHARENKO, S.U. (Kiyev); ROZENBERG, M.I. (Kiyev)

From experience of teaching physics in the schools of the Ukrainian S.S.R. Fiz.v shkole 20 no.4:84-89 Jl-Ag '60. (MIRA 13:8)
(Ukraine--Physics--Study and teaching)

GONCHARENKO, S. (Kiev, USSR); ROZENBERG, M. (Kiev, USSR)

Correlation between teaching physics and manual training of students. Mat i fiz Bulg 5 no.6:32-39 N-D '62.

L 54654-65

ACCESSION NR: AT5014965 UR/0000/65/000/000/0084/0090

AUTHOR: Balkasheva, L. U.; Palchevskaya, A. Ye.; Goncharenko, S. V.

12

34

[illegible] The effect of fast neutrons on the culture and morphological characteristics [illegible] mesentericus

SOURCE: AN UkrSSR. Institut fiziologii. Biologicheskoye deystviye neytronnogo izlucheniya (Biological effect of neutron radiation). Kiev, Naukova dumka, 1965, [illegible]

TOPIC TAGS: fast neutron, neutron radiation, biological effect, Bacillus, gamma radiation

ABSTRACT: Results are presented of a study of the cultural and morphological pro- [illegible] variants of Bacillus mesentericus [illegible] isolated during [illegible] fast neutrons. This work [illegible] investigation of [illegible] connection between changes of these properties and the formation of hydro- [illegible] ferments during irradiation. A suspension of the bacteria was irradiated with [illegible] neutrons (doses of 50—1000 rad) and cultured on various media. Then the [illegible] of colonies was examined. It was found that morphological changes were [illegible] doses of neutrons than [illegible] for instance, gamma radiation). In most cases no essential differences were noted in the

Card [illegible]

L 54654-65

ACCESSION NR: AT5014965

[illegible] of cultures grown on milk and carbohydrate media. The initial strain of [illegible] mesenteroides no. 10 is characterized by grayish [illegible] colonies with a con-

[illegible]

[illegible] pigment variant—green and [illegible] to powdery white de-

[illegible] figures [illegible]

[illegible] Institut mikrobiologii AN UkrSSR (Institute of Microbiology,

SUBMITTED: 22Feb65 ENCL: 00 SUB CODE: LS

[illegible] 002

GONCHARENKO, S. S.

2

Adsorption of coloring substances on Collactivite carbon. V. A. Bukanov and S. S. Goncharenko (Voronezh Chem. Technol. Inst.). *J. Applied Chem.* (U.S.S.R.) 20, 449-53(1947)(in Russian); cf. *C.A.* 41, 4300g.—Decolorization was detd. with the Stammer colorimeter on 50-ml. samples of a 6% soln. of tech. xylose, d. 1.06, initial color 557.1° Stammer, treated with 0.25 g. Collactivite (made from hydrolytic cellolignin) at 80° for 1 hr. Acidification of the soln. decreased the color which was again restored on neutralization; hence, the coloring substance is a weak org. acid with colored (yellow) anion, formed in the decompn. of xylose. Collactivite decolorized the neutral soln. by 74.2%; its decolorizing effect diminished with increasing addn. of H_2SO_4. Collactivite can be considered to be a H^+ zeolite, exchanging its H^+ with the cations of the coloring substance and thus converting the colored anions into the colorless undissocd. org. acids. The decolorizing effect of Collactivite lags behind that of Norite, e.g., with 1.00, 5.47, 10.93, 13.66% of either carbon (per wt. of the dry matter of the soln.), the decolorization attained was, with Norite, 61.4, 96.7, 98.1, 98.8%, with Collactivite 23.8, 64.6, 75.0, 78.2. The effect of Collactivite never exceeds 80% decolorization, that of Norite does attain 100%. The most economical amts. are, for Norite, 6%, for Collactivite 8-10% (per wt. of dry matter). As a function of time of contact, after 10, 20, 30, 60 min. Norite produced 68.6, 87.2, 94.7, 98.7% decolorization, Collactivite 28.2, 40.2, 58.2, 60.0%, i.e., establishment of adsorption equil. is slower with the latter. Adsorption with Collactivite is fully reversible. N. Thon

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

SMIRNOVA, K.A., kand. tekhn. nauk; GONCHARENKO, T.S., inzh.

Unfired serpentine-silicate material for soundproofing and filtration. Trudy NIIStroikeramiki no.24:158-162 '64.
(MIRA 18:7)

AUTHORS: Goncharenko, V.; Lubyanitskiy, N. SOV-107-58-8-23/53

TITLE: Radiofication of the Crimea Oblast' (Iz opyta radiofikatsii krymskoy oblasti)

PERIODICAL: Radio, 1958, Nr 8, pp 18-19 (USSR)

ABSTRACT: The receiver described is fixed-tuning circuit using a crystal detector and two transistor triodes as AF amplifiers. The set can be used as an "ether radio-point" in conditions where a wire-broadcast network is impractible. The coil is adjusted to a nearby local station and the whole set can be assembled on a panel and inserted into a loudspeaker cabinet. Torch batteries in series or a section of an HT battery can be used as a power source. A two-beam L or T antenna may be used. Sets of this type have been used by the authors in the Crimea oblast', but they suffer from low selectivity. Efforts are being made to produce a similar set with better selectivity. There are two drawings and 1 circuit diagram.

1. Radio receivers--Design 2. Crystal detectors--Applications
3. Transistors--Applications 4. Radio receivers--USSR

Card 1/1

NADYBAIDZE, I.; GONCHARENKO, V.

This is only the beginning! Okhr. truda i sots. strakh. 3 no.9: 34-36 S '60. (MIRA 14:4)

1. Predsedatel' zavkoma Ordzhonikidzevskogo steklotarno-izolyatornogo zavoda (for Nadybaidze). 2. Starshiy inzhener po tekhnike bezopasnosti Ordzhonikidzevskogo steklotarno-izolyatornogo zavoda (for Goncharenko).

(Ordzhonikidzevskiy District--Glass manufacture--Hygienic aspects)

GONCHARENKO, V.

Alla Kudelina's wings. Kryl.rod. 12 no.3:10-11 Mr '61.
(MIRA 14:6)

(Aerial sports)

BELOUSOV, V., pensioner; GONCHARENKO, V., tekhnicheskiy inspektor;
ZOBACHEV, K.; MANAFOV, G.; KOLOGRIV, P.; KABAKOV, Yu., instruktor

We suggest, study and confer. Sov. profsoiuzy 17 no.24:17-18 D '61. (MIRA 14:12)

1. Oblastnoy komitet profsoyuza rabochikh metallurgicheskoy promyshlennosti, g. Magadan (for Zobachev). 2. Zaveduyushchiy otdelom truda i zarabotnoy platy Azerbaydzhanskogo soveta profsoyuzov (for Manafov). 3. Neshtatnyy korrespondent zhurnala "Sovetskiye profsoyuzy", g. Khabarovsk (for Kologriv). 4. Chernigovskiy oblastnoy sovet professional'nykh soyuzov (for Kabakov).

(Industrial hygiene) (Trade unions)

GONCHARENKO, V.

Watchman. Okh.truda i sots.strakh. 5 no.1:18-19 Ja '62.
(MIRA 15:2)

1. Tekhnicheskiy inspektor Severo-Ostinskogo soveta professional'nykh soyuzov.
(Ordzhonikidzevskiy District—Glass manufacture—Hygienic aspects)

GONCHARENKO, V., tekhnicheskiy inspektor; SOLOV'YEV, L.; LEKONT, G.; SEROVA, I.; GOLUB', T.; MEDVEDEV, L.; PEKISHEV, V.; ANISIMOV, P.; ASTASHEVA, V.; DOSHCHATOV, V.; SERGEYEV, V.; YUOZAPAVICHYUS, L. [Juozapavicius, L.]; MISHURIS, M.; VORONTSOV, N.; BOCHKAREV, G.

Readers' conference by correspondence. Okhr. truda i sots. strakh. 5 no.5:31-32 My '62. (MIRA 15:5)

1. Tekhnicheskiye inspektora Omskogo oblastnogo soveta profsoyuzov (for Solov'yev, Lekont, Serova, Golub', Medvedev). 2. Tekhnicheskiy inspektor respublikanskogo soveta profsoyuzov, Turkmenskaya SSR (for Pekishev). 3. Zaveduyushchiy otdelom sotsial'nogo strakhovaniya Tyumenskogo oblastnogo soveta professional'nykh soyuzov (for Doshchatov). 5. Zaveduyushchiy yuridicheskoy konsul'tatsiyey Arkhangel'skogo soveta professional'nykh soyuzov (for Sergeyev). 6. Zaveduyushchiy otdelom okhrany truda Litovskogo respublikanskogo soveta professional'nykh soyuzov (for Yuozapavichyus). 7. Zaveduyushchiy yuridicheskoy konsul'tatsiyey Luganskogo oblastnogo soveta professional'nykh soyuzov (for Mishuris). 8. Zaveduyushchiy otdelom sotsial'nogo strakhovaniya Smolenskogo oblastnogo soveta professional'nykh soyuzov (for Vorontsov). 9. Predsedatel' komissii okhrany truda Barnaul'skogo motornogo zavoda (for Bochkarev).

(Industrial hygiene--Periodicals)

BONDAR', N., tekhnik-mekhanik; GONCHARENKO, V.; ANDREYEV, V.; AVLAKHOVA, A.

Editor's mail. Okhr.truda i sots.strakh 5 no.10:32-33 O '62.
(MIRA 15:11)

1. Remontno-mekhanicheskiye masterskiye tresta "Ukrgazneftestroy", Kiyev (for Bondar'). 2. Tekhnicheskiy inspektor Severo-Osetinskogo oblastnogo soveta professional'nykh soyuzov, g. Ordzhonikidze (for Goncharneko). 3. Starshiy inzh. po tekhnike bezopasnosti Stroytresta No.159, Tashkent (for Andreyev). 4. Predsedatel' gorodskogo komiteta professional'nogo soyuza meditsinskikh rabotnikov, g. Yalta (for Avlakhova).

(INDUSTRIAL HYGIENE)

GONCHARENKO, V. (Ordzhonikidze)

Health shop. Okhr. truda i sots. strakh. 6 no.3:21 Mr '63.
(MIRA 16:4)

(Ordzhonikidze—Glass manufacture—Hygienic aspects)

GONCHARENKO, V., absolyutnyy chempion SSSR

Journeys under the clouds (conclusion). Kryl. rod. 15 no.12:14-16
D '64. (MIRA 18:3)

YEGOROV, K., sud'ya vsesoyuznoy kategorii; GONCHARENKO, V., absolyutnyy chempion Ukrainy po planernomu sportu; KILNA, A.; EPERMANIS, Z.

In soaring flight. Kryl. rod. 16 no.9:7 S '65.

(MIRA 18:12)

1. Nachal'nik Liyepayskogo obshchestvennogo kluba (for Epermanis).

GONCHARENKO, M., inzh.-polkovnik; GONCHARENKO, V., inzh.

Nature prompts.... Voen. znan. 41 no.3:36-37 Mr '65. (MIRA 18:5)

YERMOLAYEV, N.F., inzh.; GONCHARENKO, V.; MATVEYEV, Yu.M.; YEMEL'YANOV, A.V., kand. ekonom. nauk; SPIVAK, E.I., inzh.

Book reviews. Stal' 25 no.7:640-642; 659-663 Jl '65. (MIRA 18:7)

1. Chelyabinskiy politekhnicheskiy institut i UralNITI (for Goncharenko, Matveyev). 2. Institut chernoy metallurgii v g. Dnepropetrovske (for Yemel'yanov). 3. TSentroenergometallurgprom (for Spivak).

YUDIN, G.N.; GONCHARENKO, V.A.

Results of the operation of the interfactors school for tube-mill operators. Metallurg no.2:15-17 F '56. (MIRA 9:9)

1.Nachal'nik otdela truda Gl vtrubostali Ministerstva chernoy metallurgii SSSR (for Yudin).2.Nachal'nik normativno-issledovatel'skoy laboratorii Zakavkazskogo metallurgicheskogo zavoda (for Goncharenko).

(Rolling (Metalwork))

PHASE I BOOK EXPLOITATION SOV/3531

Goncharenko, Vera Aleksandrovna, and Naum Benediktovich Rozenfel'd

Peredovoy opyt prokatki trub na ustanovkakh s avtomaticheskim stanom (Advanced Technique in Tube Manufacture on Units With Plug-Rolling Mill) Moscow, Metallurgizdat, 1959. 118 p. 1,500 copies printed.

Ed.: I. G. Astakhov; Ed. of Publishing House: A.G. Golyatkina; Tech. Ed.: M.R. Kleynman.

PURPOSE: This booklet is intended for workers and foremen at tube-manufacturing plants.

COVERAGE: The authors present a generalization of the advanced work methods used by the Zakavkazskiy Metallurgicheskiy zavod (Transcaucasian Metallurgical Plant)in the manufacture of tubes on plug-rolling mills, and also a generalization of works of the interplant school on the exchange of experience acquired at various plants. Engineers Ye.A. Kupershteyn and L.S. Oslamenko are mentioned as having contributed to the development of rolling processes. The authors thank P.A. Tseretelli,

Card 1/4

P.P. Bulgakov, A.Sh. Vashakidze, I.A. Utin, G.I. Chuchua, I.G. Mindlin, Sh.P. Sakvarelidze, and I.M. Kravchenko for their assistance in preparing the book. There are 14 references, all Soviet.

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Advanced Technique in Tube Manufacture (Cont.) SOV/3531

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VI. Manufacturing Tubes of Large Diameter, Including Tubes With Thin Walls 105
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AVAILABLE: Library of Congress

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VK/mg
7/7/60

GONCHARENKO, Vsevolod Antonovich; VISHNYAKOVA, Ye.A., red.; POPOV, N.D., tekhn. red.

[First steps into the future] Pervye shagi v budushchee. Moskva, Izd-vo "Sovetskaia Rossiia," 1961. 110 p. (MIRA 14:7)

1. Direktor sovkhoza "Gazyrskiy" Krasnodarskogo kraya (for Goncharenko)
(Krasnodar Territory—Farm management)

GONCHARENKO, V.A.

Heads of sunflower as a valuable feed. Zemledelie 26 no.9:60-62
S '64. (MIRA 17:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut maslichnykh i efiromaslichnykh kul'tur.

GONCHARENKO, V.G., dotsent; BAKHMAN, V.I., inzhener neftebazovogo khozyaystva.

[redacted]

Regeneration of truck and tractor oils. Neftianik 1 no.4:
3-4 Ap '56. (MLRA 9:10)

(Oil reclamation)

GONCHARENKO, V. G.

PHASE I BOOK EXPLOITATION SOV/5053

Vsesoyuznaya konferentsiya po treniyu i iznosu v mashinakh. 3d, 1958.

Iznos i iznosostoykost'. Antifriktsionnyye materialy (Wear and Wear Resistance. Antifriction Materials) Moscow, Izd-vo AN SSSR, 1960. 273 p. Errata slip inserted. 3,500 copies printed. (Series: Its: Trudy, v. 1)

Sponsoring Agency: Akademiya nauk SSSR. Institut mashinovedeniya. Resp. Ed.: M. M. Khrushchov, Professor; Eds. of Publishing House: M. Ya. Klebanov, and S. L. Orpik; Tech. Ed.: T. V. Polyakova.

PURPOSE: This collection of articles is intended for practicing engineers and research scientists.

COVERAGE: The collection, published by the Institut mashinovedeniya, AN SSSR (Institute of Science of Machines, Academy of Sciences USSR) contains papers presented at the III Vsesoyuznaya Konferentsiya po treniyu i iznosu v mashinakh (Third All-Union Conference on Friction and Wear in Machines) which was held April 9-15, 1958. Problems discussed were in 5 main areas: 1) Hydrodynamic Theory of Lubrication and Friction Bearings (Chairmen: Ye. M. Gut'yar, Doctor of Technical Sciences, and A. K. D'yachkov, Doctor of Technical Sciences); 2) Lubrication and Lubricant Materials (Chairman: G. V. Vinogradov, Doctor of Chemical Sciences); 3) Dry and Boundary Friction (Chairmen: B. V. Deryagin, Corresponding Member of the Academy of Sciences USSR, and I. V. Kragel'skiy, Doctor of Technical Sciences); 4) Wear and Wear Resistance (Chairman: M. M. Krushchov, Doctor of Technical Sciences); and 5) Friction and Antifriction Materials (Chairmen: I. V. Kragel'skiy, Doctor of Technical Sciences, and M. M. Krushchov, Doctor of Technical Sciences). Chairman of the general assembly (on the first and last day of the conference) was Academician A. A. Blagonravov. L. Yu. Pruzhanskiy, Candidate of Technical Sciences, was scientific secretary. The transactions of the conference were published in 3 volumes, of which the present volume is the first. This volume contains articles concerning the wear and wear resistance of antifriction materials. Among the topics covered are: modern developments in the theory and experimental science of wear resistance of materials, specific data on the wear resistance of various combinations of materials, methods for increasing the wear resistance of certain materials, the effects of friction and wear on the structure of materials, the mechanism of the seizing of metals, the effect of various types of lubricating materials on seizing, abrasive wear of a wide variety of materials and components under many different conditions, modern developments in antifriction materials, and the effects of finish machining on wear resistance. Many personalities are mentioned in the text. References accompany most of the articles.

Goncharenko, V. G. Some Results of an Investigation of the Quality of Piston Rings of Diesel Motors Used in Automotive Tractors 208

Kunin, N. F., and E. M. Sokolova. Isothermal Wear of Metals as a Result of Their Interaction With a Polishing Abrasive 216

Marakikh, I. L., and A. I. Volodin. Analysis of the Wear of the Flanges of the Crankshaft of a D-50 Diesel Locomotive, and Systematic Methods for Measuring the Wear 221

Puzankov, V. V. Surface Finish of the Flanges of the Crankshaft and Bearing Bushings of the GAZ-51 Automobile 225

Savitskiy, K. V. On the Problem of the Relationship Between the Abrasive Wear of Metals and the Strength Properties of the Lattice . 230

Card 9/13

7

GONCHARENKO, V.G.; ZHUK, A.A., red.; ZENIN, V.V., tekhn.red.

[Investigating piston rings of motor-vehicle engines] Issledovanie porshnevykh kolets dvigatelei avtotraktornogo tipa. Izd-vo Saratovskogo univ. 1961. 197 p. (Saratov. Institut mekhanizatsii sel'skogo khoziaistva. Trudy, no.25)
(MIRA 15:1)

(Piston rings)

L 36297-66 EWT(d)/EWT(m)/T-2/EWP(f)

ACC NR: AR5025465 SOURCE CODE: UR/0273/65/000/008/0007/0007

23 17 B

AUTHOR: Goncharenko, V. G.

TITLE: Determination of the parameters of optimal values and profile of piston rings

SOURCE: Ref. zh. Dvigateli vnutrennego sgoraniya, Abs. 8.39.56

REF SOURCE: Tr. Saratovsk. in-ta mekhaniz. s.-kh., vyp. 33, ch. 1, 1964, 161-170

TOPIC TAGS: piston ring, engine piston 17

ABSTRACT: A method for determining the parameters of piston rings of high adjustability is developed and recommended by the author. The method eliminates complex calculations which are usually accompanied by the use of numerous coefficients whose value does not reveal the characteristics of the mechanical processing and real conditions of ring installation. This method for determining the parameters is recommended for the design of piston rings for new engines as well as for improvement of existing rings. No less important is the fact that the method is a reliable basis for creating sound standards for piston ring parameters, which do not now exist. The feasibility and soundness of the method are confirmed by a new method based on it for determining the profile of a ring in the free position. This method differs favorably in character and simplicity of application from existing methods and can easily be compensated depending on the nature of production technology, material, and construction and other factors. 3 figures, bibliography of 3 citations. [Translation of abstract]

SUB CODE: 21

Card 1/1 UDC: 621.432-242.3.001.24

GONCHARENKO, V.K.; LUR'YE, D.A.; DUDNIK, V.M.

Problems of the specialized production of molding materials in the Ukraine. Lit. proizv. no.11:7-8 N '64. (MIRA 18:8)

GONCHARENKO, V.K

GONCHARENKO, V.K.

Improving the quality of packing used in hydrolysis equipment.
Gidroliz. i lesokhim prom. 8 no.2:21 '55. (MLRA 8:10)

1. Glavnyy inzhener Krasnoyarskogo gidroliznogo zavoda
(Packing (Mechanical engineering)) (Hydrolysis)

KARPENKO, V.I.; GONCHARENKO, V.K., glavnyy inzhener zavoda.

We will double alcohol output. Gidroliz. i lesokhim.prom. 8 no.7: 27-28 '55. (MIRA 9:4)

1.Direktor Krasnoyarskogo gidroliznogo zavoda (for Karpenko)
(Alcohol)

MARDER, M.V., inzh.-teplotekhnik; GONCHARENKO, V.K.

Make wider use of crude lignin by burning in a mixture with a basic fuel. Gidroliz i lesokhim. prom. 12 no.5:15-18 '59.
(MIRA 12:10)

1.Direktor Krasnoyarskogo gidroliznogo zavoda (for Goncharenko).
(Lignin) (Fuel)

GONCHARENKO, V.K.

Lowering production costs. Gidroliz. i lesokhim prom. 12 no.7: 18-19 '59 (MIRA 13:3)

1. Krasnoyarskiy gidrolisnyy zavod.
(Krasnoyarsk--Wood-using industries--Equipment and supplies)

GONCHARENKO, V.M., inzhener; LEBEDEV, Ye.M., inzhener.

Casting steel gearwheels. Lit. proizv. no.3:25-26 Mr '56.
(Steel castings) (Gearing) (MLRA 9:7)

GONCHARENKO, V.M. (Kiyev)

Determining the probability of loss of stability of a shell. Izv. AN SSSR.Otd.tekh.nauk.Mekh.i mashinostr no.1:159-160 Ja-F '62. (MIRA 15:3)

(Elastic plates and shells)

S/879/62/000/000/064/088
D234/D308

AUTHOR: Goncharenko, V. M. (Kiev)

TITLE: An aspect of the statistical method in the theory of stability of shells

SOURCE: Teoriya plastin i obolochek: trudy II Vsesoyuznoy konferentsii, L'vov, 15-21 sentyabrya 1961 g. Kiev, Izd-vo AN USSR, 1962, 368-371

TEXT: The author deduces the equation of I. I. Vorovich (PMM, 23, no. 5m 1959) by a different method and obtains the relation

$$\pi n f_{ij} = \delta \rho^2 \delta_{ij} \qquad (13)$$

f_{ij} being the spectral matrix of a fluctuation process having constant spectral densities in the domain of natural frequencies of the shell. This explains the physical meaning of the parameter δ

Card 1/2

introduced by Vorovich. Assuming that the shell has one degree of freedom, one can deduce that the probability of first losses of stability is

$$P = \frac{1}{2\pi} \sqrt{- \frac{\frac{d^2V}{dq^2}(A)}{\frac{d^2V}{dq^2}}} \left[\sqrt{\frac{\beta^2}{4} + \frac{d^2V}{}(C)} - \frac{\beta}{2} \right] e^{-\frac{\beta}{\pi f}H} \qquad (15)$$

H being the height of the potential barrier. If one cannot separate a component having constant spectral densities in the domain of natural frequencies, one can construct a multi-dimensional Markov process and solve the problem with its aid.

Card 2/2

10.6300

43188
S/021/62/000/007/007/008
I006/I206

AUTHOR: Goncharenko, V.M.

TITLE: Rapidly oscillating forces in the statistical theory of stability of shells

PERIODICAL: Akademiya nauk Ukrayns'koy RSR. Dopovidi, no. 7, 1962, 867-869

TEXT: It is shown by the method of averaging that the action of random forces with a narrow spectrum and a high frequency on flexible shells is equivalent to a random increase of the upper and lower critical load value and a decrease of probability of stability loss. It is noted that a necessary condition for the applicability of the I.I. Vorovich method is the presence of forces with a constant spectral density in the frequency range of self-oscillations. There is 1 figure.

Card 1/2

S/021/62/000/007/007/008
I006/I206

Rapidly oscillating forces in the...

ASSOCIATION: Kyyvs'kyy politekhnichnyy instytut (Kiev Polytechnic Institute)

PRESENTED: by Mitropol'skyy, Yu. O., Academician AS UkrSSR

SUBMITTED: December 19, 1961

Card 2/2

16.6200

S/041/62/014/002/004/008
B112/B108

AUTHOR: Goncharenko, V. M.

TITLE: Application of Markov processes in the statistical theory of stability of shells

PERIODICAL: Ukrainskiy matematicheskiy zhurnal, v. 14, no. 2, 1962, 198-202

TEXT: The equation $dU/dq - MZ_q = dV/dq$ describes the motion of a shell with three states of equilibrium: q_1 and q_3 are the stable states, q_2 is the unstable one $(q_1 < q_2 < q_3)$. The equilibrium distribution $g = C\exp(-\beta V/\pi f)$ leads to the probability

$$P(*/\Delta t) = (2\pi\beta)^{-1} \Delta t \sqrt{-(d^2V(q_1)/dq^2)(d^2V(q_2)/dq^2)} \exp(-\beta H/\pi f)$$

for the first vibrations of the shell under the action of strong disturbances. H is the difference between the total energies $V(q_2)$ and $V(q_1)$.

/A

SUBMITTED: May 16, 1961, Kiyev

Card 1/1

L 18467-63 EWP(r)/EWT(m)/BDS AFFTC

ACCESSION NR: AR3006446 S/0124/63/000/008/V018/V018

SOURCE: RZh. Mekhanika, Abs. 8V132

52

AUTHOR: Goncharenko, V. M.

TITLE: Some dynamic problems of the statistical theory of stability of shells

CITED SOURCE: Tr. Kiyevsk. politekhn. in-ta, v. 37, 1962, 159-164

24

TOPIC TAGS: shell, stability, statistical theory, dynamic loading, Mathieu equation

TRANSLATION: The case of the dynamically loaded shell is discussed when the load has a random composition. Graphs of the probability of puncturing or slitting a circular cylindrical panel under the action of an impulse with random composition are given. Using the decomposition of the random components of the load into trigonometric series, the terms of which depend on the random values, the author proposes to investigate the stability of motion of the shell statistically, proceeding from the solution of the dynamical problem. By this method the stability of the motion described by Mathieu's equation is studied. V. M. Kornev

DATE ACQ: 28Aug63 SUB CODE: AP ENCL: 00

Card 1/1

L 10633-63 EWP(r)/EWT(m)/BDS--AFFTC--EM

ACCESSION NR: AP3003494 S/0021/63/000/006/0736/0738 52 51

AUTHOR: Goncharenko, V. M.

TITLE: Determining the average time of snapping of a cylindrical panel under a random pressure 26

SOURCE: AN UkrSSR Dopovidi, no. 6, 1963, 736-738

TOPIC TAGS: shell, shell buckling, shell snapping, time-dependent shell buckling, random-pressure effect, buckling

ABSTRACT: Time-related buckling behavior is examined for the case of a shallow oblong cylindrical panel under uniform normal pressure accompanied by stationary random perturbances. The latter cause the panel to undergo early (from the viewpoint of the classical stability theory) buckling in a certain time interval, from whose numerical value the load-carrying capacity of the panel can be valuated. The frequency of disturbances is assumed to be small as compared with the natural frequencies of the panel, as happens in cases of real perturbances of acoustic and aerodynamic origin. The initial differential equation for determining the mean time M to the first snapping was derived earlier by the author, who represented the panel deflection and its derivatives with respect to time

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L 10633-63
ACCESSION NR: AP3003494

as a Markoff process. The formula for M is given, and results of a numerical sample calculation are presented in a diagram. The possibility that even small pressures (e.g., acoustic) can cause premature snapping of the panel is noted. The article was presented by Academician Yu. O. My*tropol'sky*y [Mitropol'skiy], AN URSR. Orig. art. has: 1 figure and 7 formulas.

ASSOCIATION: Ky*yivs'ky*y politekhnichny*y insty*tut (Kiev Polytechnic Institute)

SUBMITTED: 19Jun62 DATE ACQ: 30Jul63 ENCL: 00

SUB CODE: AP NO REF SOV: 004 OTHER: 000

ch/

Card 2/2

ACCESSION NR: AP4037439 S/0021/64/000/005/0583/0586

AUTHOR: Goncharenko, V. M.

TITLE: On the escape, due to fluctuations, of a dynamic system from a given region

SOURCE: AN UkrRSR. Dopovidi, no. 5, 1964, 583-586

TOPIC TAGS: dynamic system, dynamic phase variable, phase variable, Markov system, multidimensional Markov system, excape problem, dynamical escape, fluctuation

ABSTRACT: The author considers a dynamic system, the change of phase variables of which is a multidimensional Markov system. Differential equations are deduced for the dispersion and for higher moments of a random interval of time, which lasts until the first escape from the given region. The dispersion is negligible if the perturbations are weak. Orig. art. has 13 numbered equations.

ASSOCIATION: Ky*yivs'ky*y politekhnichny*y insty*tut (Kiev Polytechnic Institute)

Card 1/2

ACCESSION NR: AT4039430 S/2879/64/000/000/0383/0390

AUTHOR: Goncharenko, V. M. (Kiev)

TITLE: Snapping of panels in the presence of random force effects

SOURCE: Vsesoyuznaya konferentsiya po teorii obolochek i plastin. 4th, Yerevan, 1962. Teoriya obolochek i plastin (Theory of plates and films); trudy* konferentsii, 1964 383-390

TOPIC TAGS: panel aluminum panel, panel snapping, snapping, shell stability, fatigue, aerodynamic fatigue, random force, panel oscillation, shell, flexible shell, Markov process, acoustic radiation

ABSTRACT: The article deals with the oscillatory movement of flexible shells under the influence of random forces. It is well known that in a number of cases, within a considerable load interval (between the lower and upper critical values), a shell may have several stable equilibrium states. Under the influence of any number of disturbing factors, a transition is possible from one of these states to another; i.e., there is a large-scale loss of stability, not predictable by the classic theory and premature from the view of that theory. This circumstance requires the introduction of considerable

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ACCESSION NR: AT4039430

corrective factors in conventional methods of stability calculation. Thus, a knowledge of the probability characteristics of large-scale stability loss, obtained on the basis of statistical data concerning perturbations which frequently seem random, may be useful. No less important are those cases in which bending is limited by the special devices for that purpose and the stability loss is not catastrophic in character, but in which frequent transitions to a perturbed state under the influence of a time-variable load may be dangerous from the point of view of the accumulation of fatigue faults or damage. On occasion, such a load is of a clearly defined random nature (for example, in the case of acoustic or aerodynamic fatigue). In these cases, the statistical characteristics of the multiple stability loss must be computed (for example, the mean number of claps per fixed period of time). The theory of Markov processes is employed here in the solution of the problem. An elongated sloping cylindrical panel of radius R, width b, thickness h is considered, with elastic constants E and ν, the edges of which ($\beta = o, b$) are hinge-connected with immobile ribs. The panel is assumed to be under the influence of a uniformly distributed transverse pressure. The problem is shown to be one of studying the random process $\zeta(t)$, which may be regarded as the result of the passage of process $\xi(t)$ through an inertial linear system described by

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ACCESSION NR: AT4039430

$$\zeta = -\beta\rho^{-1}\zeta - \frac{dV}{d\zeta} + \frac{4}{\pi h\rho}\xi(t),$$

$$V = \frac{2Eh^3}{b^4(1-\nu^2)\rho}\text{Э}^{*}(M\lambda). \qquad (1)$$

where ρ is the mass per unit area of center surface, and 3^* is a dimensionless parameter of the full potential energy. In a general case, this problem is extremely complex and is susceptible to graphic solution only if certain assumptions are made with respect to $\xi(t)$. An equation is derived

$$M(-\infty) = M(\zeta_3) = 0. \qquad (2)$$

on the basis of which, in Figure 1 of the Enclosure, the results are given of calculations made for an aluminum panel with k = 10; $hb^{-1} = 0.5 \cdot 10^{-2}$; h = 1.6 mm; $\lambda_+ = 18$; $\lambda_- < 0$, located in a field of acoustic radiation. An estimation of the correlation time of this radiation showed that it did not exceed $6.3 \cdot 10^{-4}$ sec, which is considerably less than the period of natural vibrations ($7.8 \cdot 10^{-3}$ sec). Equations are obtained which are of interest

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ACCESSION NR: AT4039430

in the study of fatigue damage, permitting the determination of the number N of claps per unit time: $N = M^{-1}$. The third and final section of the paper deals with the distribution function p (Δ t) which is shown to be an exhaustive characteristic of the random value t_*, expressing the probability that in the course of the time interval Δt there will occur at least one clap. Orig. art. has: 2 figures and 27 formulas.

ASSOCIATION: None

SUBMITTED: 00 DATE ACQ: 14May64 ENCL: 01

SUB CODE: AS NO REF SOV: 010 OTHER: 001

Card 4/5

ACCESSION NR: AT4039430

ENCLOSURE: 01

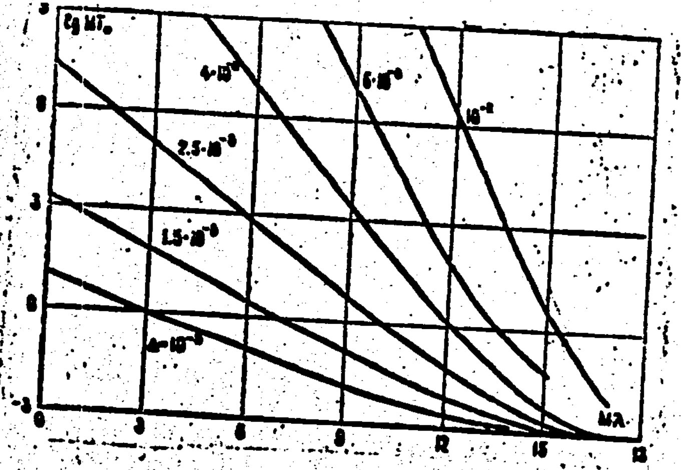

Fig. 1

Card 5/5

DRUZHKIN, Lev Aleksandrovich; GONCHARENKO, V.M., red.

[Problems in field theory] Zadachi teorii polia. Moskva, Mosk. in-t radioelektroniki i gornoi elektromekhaniki. Pt.1. 1963. 170 p. (MIRA 17:9)

DRUZHKIN, Lev Aleksandrovich; GONCHARENKO, V.M., red.

[Problems in field theory] Zadachi teorii polia. Moskva,
Mosk. in-t radioelektroniki i gornoi elektromekhaniki.
Pt.3. 1964. 68 p. (MIRA 17:12)

DRUZHKIN, Lev Aleksandrovich; GONCHARENKO, V.M., red.

[Problems in field theory] Zadachi teorii polia. Moskva, Mosk. in-t radioelektroniki i gornoi elektromekhaniki. Pt.2. 1964. 170 p. (MIRA 18:10)

GONCHARENKO, V.N., inzh.; PALIYCHUK, A.S., inzh.; SHCHERBINA, A.V., inzh.

Start of a BKZ-160-100F boiler and VPT-25-4 turbine with sliding steam parameters. Elek. sta. 35 no.7:2-6 Jl '64. (MIRA 17:11)

SAFRONOV, B.G.; GONCHARENKO, V.P.; GONCHARENKO, D.K.

[Propagation of a plasma clot in a magnetic field] K voprosu o rasprostranenii plazmennogo sgustka v magnitnom pole. Khar'kov, Fiziko-tekhn. in-t AN USSR, 1960. 201-98 p. (MIRA 17:1)
(Plasma (Ionized gases)) (Magnetic fields)

S/781/62/000/000/023/036
H

AUTHOR: Safranov, V. G., Goncharenko, V. P., Goncharenko, D. K.

TITLE: On the propagation of a plasmoid in a magnetic field

PERIODICAL: Fizika plazmy i problemy upravlyayemogo termoyadernogo sinteza; doklady I konferentsii po fizike plazmy i probleme upravlyayemykh termoyadernykh reaktsiy. Fiz.-tech. inst. AN Ukr. SSR. Kiev, Izd-vo AN Ukr. SSR, 1962, 111-112.

TEXT: The purpose of this work is a qualitative clarification of the behavior of plasmoids in a plane coinciding with the direction of the initial velocity and the direction of the magnetic field.

In connection with an investigation of toroidal magnetic traps we have noted that a plasmoid injected tangentially in the field of a toroidal solenoid propagates not only in the direction of its initial velocity, making a 360° revolution along the toroid, but also in an opposite direction. The magnetic field was constant in time.

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S/781/62/000/000/023/036

On the propagation of a plasmoid in a . . .

This phenomenon could not be explained from the point of view of elementary theory of the leading center, since all the plasmoid particles had on entering the magnetic field a velocity in one (right-hand) direction, and had no velocity component in the opposite direction, and should therefore move along a certain helical trajectory in one direction only. The propagation of a part of the plasmoid along the magnetic force lines in the opposite direction indicates that when the plasmoid enters into the magnetic field, processes occur which lead to the appearance of particles with velocities of arbitrary direction.

Let a plasmoid having a certain translational motion v_0, density n, and conductivity σ enter through a magnetic field gradient into a homogeneous field of the solenoid H_0. This case is analogous to the motion of a piece of conducting metal through a transverse magnetic field. The plasmoid forces out the magnetic field from a certain volume of the solenoid and is under a magnetic pressure $H^2/8\pi$ on all sides, except the directions that are parallel to the magnetic force lines. Such anisotropy of the magnetic pressure should lead to a splashing of plasma along the force lines of the magnetic field.

There are no references.

Card 2/2

ACCESSION NR: AT4036068 S/2781/63/000/003/0255/0261

AUTHORS: Belikov, A. G.; Goncharenko, V. P.; Mishchenko, V. M.; Safronov, B. G.; Slavny*y, A. S.

TITLE: Investigation of coaxial plasma accelerator

SOURCE: Konferentsiya po fizike plazmy* i problemam upravlyayemogo termoyadernogo sinteza. 3d, Kharkov, 1962. Fizika plazmy* i problemy* upravlyayemogo termoyadernogo sinteza (Plasma physics and problems of controlled thermonuclear synthesis); doklady* konferentsii, no. 3. Kiev, Izd-vo AN UkrSSR, 1963, 255-261

TOPIC TAGS: plasmoid, plasmoid acceleration, plasma source, high temperature plasma, plasma density, discharge plasma

ABSTRACT: A coaxial electrodynamic plasma accelerator is investigated in order to determine some of its parameters, namely the plasmoid velocity, the plasmoid density, the contamination of the plas-

Card 1/4

ACCESSION NR: AT4036068

ma with heavy ions, and the energy distribution of the ions. The electrodynamic plasma accelerator consists of two coaxial cylinders (72 and 32 mm inside diameter, length of accelerating electrodes 175 mm). The pressure used was (1--3) x 10^{-3} m/m^2, and the working volume was filled with gas using a pulsed valve described by J. Marshall (Fizika goryachey plazmy* i termoyaderny*ye reaktsii, Atomizdat, M. 1959, p. 290). The acceleration of the plasma by the coaxial accelerator was investigated as a function of the delay between the start of the entry of the gas into the working volume (more accurately, the start of operation of the hammer of the valve) and the discharge of the source. The discharge was investigated with an internal magnetic probe. The plasmoid velocity was measured with optical (photomultiplier) and external magnetic probes. The mass composition and the energy of the ions of the plasmoids were determined by the Thomson parabola method. The results have shown that two plasmoids, moving with different velocities, are produced during the acceleration of a plasma with a coaxial electrodynamic

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ACCESSION NR: AT4036068

source. The formation of the plasmoids is not connected with the periodicity of the discharge in the source. Further research is necessary to ascertain the nature of the first plasmoid. The charged-particle density exceeds 10^{13} cm^{-3}, the hydrogen ion energy in the fast plasmoid reaches 4--5 keV, and the plasmoid impurities are high, 50--60% in the slow plasmoid and less in the fast one. Exact determination of the impurity contents in the fast plasmoid is difficult. Orig. art. has: 10 figures.

ASSOCIATION: None

SUBMITTED: 00 DATE ACQ: 21May64 ENCL: 01

SUB CODE: ME NR REF SOV: 002 OTHER: 003

Card 3/4

ACCESSION NR: AT4036068

ENCLOSURE: 01

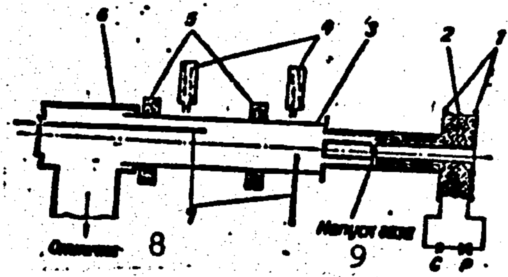

Diagram of accelerator: 1 - source electrodes, 2 - insulator, 3 - glass tube, 4 - photomultiplier, 5 - external magnetic probe, 6 - vacuum chamber, 7 - internal magnetic probe, 8 - vacuum, 9 - gas inlet

Card 4/4

ACCESSION NR: AP4035694 S/0057/64/034/005/0847/0852

AUTHOR: Belikov, A.G.; Goncharenko, V.P.; Mishchenko, V.M.; Safronov, B.G.; Slavny*y, A.S.

TITLE: Production of fast plasma bursts with a coaxial plasma gun

SOURCE: Zhurnal tekhnicheskoy fiziki, v.34, no.5, 1964, 847-852

TOPIC TAGS: plasma, plasma gun, coaxial gun, plasma burst, fast ion

ABSTRACT: This paper reports a continuation of previous work by the same five authors (Sb."Fizika plasmy* i problemy* upravlyayemogo termoyadernogo sinteza",No.3, Izd.AN USSR,Kiev,1964). The velocity, density and other properties of deuterium plasma bursts obtained with a coaxial cylindrical plasma gun were determined as functions of the discharge voltage and the time delay between admission of the gas and initiation of the discharge. Plasma bursts were obtained which contained more than 10^{17} particles and had densities greater than 10^{13} cm^{-3} and velocities greater than 8 to 9 x 10^7 cm/sec. The plasma gun consisted of two coaxial cylinders 32 mm and 72 mm in diameter and 17.5 cm long. One cubic centimeter (standard conditions) of deuterium was admitted to the annular space through openings in the wall of the in-

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ACCESSION NR: AP4035694

ner cylinder. Gas began to enter the interelectrode space 170 microsec after the valve was triggered, and the valve remained open for 80 microsec. A 27-microfarad capacitor charged to 20 kV or less was discharged through the gun. The resulting plasma burst was observed in a 95-mm glass drift tube. No confining axial magnetic field was used. The plasma bursts were analyzed with a Thomson mass spectrometer located 2.5 meters from the source. The velocity of the bursts was determined from the flight time between two external magnetic probes located 80 cm and 200 cm from the gun. The density was monitored by observing the cut-off of 8-mm microwaves at 80 cm from the source. In some cases the total energy of the plasma was estimated from calorimetric measurements. The ions in the plasma bursts were distributed over a wide range of energies. The velocity of the burst as determined from the flight time between the two magnetic probes agreed with that calculated from the ion energies as measured with the mass spectrometer. The highest velocities were achieved with a delay (between triggering the gun and applying the potential) of 200 to 250 microsec. When the delay was less than 170 microsec, gas did not enter the interelectrode space until after the potential had been applied. Under these conditions only slow bursts were formed. Normally there were two bursts per shot, and these had widely different velocities. When the delay was increased beyond about 250

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microsec, the slow burst grew in size at the expense of the fast one, and the two bursts tended to merge. Orig.art.has: 2 formulas, 9 figures and 1 table.

ASSOCIATION: none

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Card

BARDIN, M.B.; GONCHARENKO, V.P.

Polarographic behavior of osmium on the rotating platinum microdisk electrode. Part 1. Zhur.fiz.khim. 38 no.11:2626-2632 N '64. (MIRA 18:2)

1. Kishinevskiy gosudarstvennyy universitet.

18C

L 35031-65 EWT(m)/EWP(b)/EWP(t) JD

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AUTHOR: Paton, B. Ye.; Dudko, D. A.; Medovar, B. I.; Latash, Yu. V.; Maksimovich, B. I.; Shevchenko, A. I.; Stupak, L. M.; Goncharenko, V. P.; Grigor'yev, L. F.; Petukhov, G. K.; Chudin, N. I.; Lubenets, I. A.; Yartsev, M. A.; Keys, N. V.; Tulin, N. A.; Kapel'nitskiy, V. G.; Privalov, N. T.; Pis'mennov, V. S.; Kholodov, Yu. A.; Bystrov, S. N.; Bastrakov, N. F.; Donets, I. D.; Silayev, A. Ya.

TITLE: Method of electroslag casting of ingots. Class 18, No. 168743.

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TOPIC TAGS: ingot casting, ingot electroslag casting, electroslag melting, steel melting, alloy melting, metal melting

ABSTRACT: This Author Certificate introduces a method of electroslag casting of ingots in an open or protective atmosphere or in vacuum, in which slag is first melted in a mold with a nonconsumable or consumable electrode arc or plasma jet. To improve the metal quality and the ingot surface and to raise the yield, the molten metal or, if needed, the slag is poured into the mold through a hollow consumable or nonconsumable electrode (see Fig. 1 of the Enclosure). Orig. art. has: 1 figure. [ND]

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